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16. Abstract This report catalog contains the BART Impact Program management documents which are available through the National Technical Information Service. The report is divided into six sections: Section I and II: The Pre-BART data collection, Section III: Working Papers, Section IV: Planning Documents, Section V: Technical Memoranda and Section VI: Final Reports.			
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BART IMPACT PROGRAM
REPORT CATALOG



July 1976

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Prepared for
U.S. DEPARTMENT OF TRANSPORTATION
and
U.S. DEPARTMENT OF HOUSING and URBAN DEVELOPMENT
Washington, D.C.



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REPORT CATALOG
BART IMPACT PROGRAM

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BY THE METROPOLITAN TRANSPORTATION COMMISSION
BERKELEY, CALIFORNIA JULY 1976

PREFACE

The BART Impact Program is a five-year comprehensive, policy-oriented study and evaluation of the impacts of the San Francisco Bay Area's new rapid transit system (BART).

The program is being conducted by the Metropolitan Transportation Commission, a nine-county regional agency established by state law in 1970.

The program is financed by the U.S. Department of Transportation, the U.S. Department of Housing and Urban Development, and the California Department of Transportation. Management of the Federally-funded portion of the program is vested in the U.S. Department of Transportation.

The BART Impact Program covers the entire range of potential rapid transit impacts, including impacts on traffic flow, travel behavior, land use and urban development, the environment, the regional economy, social institutions and life styles, and public policy. The incidence of these impacts on population groups, local areas, and economic sectors will be measured and analyzed. The benefits of BART, and their distribution, will be weighted against the negative impacts and costs of the system in an objective evaluation of the contribution that the rapid transit investment makes toward meeting the needs and objectives of this metropolitan area and all of its people. It is expected that the impact assessment methodologies and certain of the assessment findings will be useful to other urban areas contemplating major transportation investments.

This report catalog identifies and includes an abstract of each report prepared to date under the program. The early pre-BART perishable data collection projects were reported via two series of final reports known as the BART I and BART II series. Reports in subsequent phases of the program were issued as Working Papers, Planning Documents, Technical Memoranda, and Final Reports.

This report catalog will be updated periodically. All reports identified herein are available through the National Technical Information Service (NTIS), U. S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

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SECTION I. Pre-BART Data Collection

BART I: Traveler Behavior Studies

This series of documents was produced for the Metropolitan Transportation Commission by the Pre-BART data collection projects conducted by the Institute of Urban and Regional Development, University of California, Berkeley.

1. Report No.	2. Government Accession No. PB 236 736/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Overview and Summary (Part I of BART I)		5. Report Date May 31, 1973	
		6. Performing Organization Code	
7. Author(s)		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development Washington, D. C.		11. Contract or Grant No. UMTA Technical Studies Grant CA-09-0020	
		13. Type of Report and Period Covered BART-I Report	
14. Sponsoring Agency Code		15. Supplementary Notes	
16. Abstract Overview and Summary of the studies undertaken as part of the BART-1 contract with University of California, Berkeley, Institute of Urban and Regional Development, dealing with various aspects of pre-BART travel behavior. It includes a background to the BART impact studies and a summary of the nature and conduct of the BART-1 studies. It describes the organization of the study and contains a list of the participants. In addition, it contains a list of related papers and reports, and a list of data products.			
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1. Report No.	2. Government Accession No. PB 236 734/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Pre-BART Traveler Attitudes and Perceptions: East Bay Panel (Volume I of Part II, Traveler Study)		5. Report Date May 31, 1973	
		6. Performing Organization Code	
7. Author(s) Frances Carp, Donald Appleyard I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. UMTA Technical Studies Grant CA-09-0020	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-I Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This is a report on interviews conducted with a panel of East Bay residents shortly before the first section of BART became operational with the overall objective of studying the BART Traveler's Environment and his responses to it. Chapters include collection of perishable pre-BART data, characteristics of the panels, information about BART, sources of information, general attitudes toward BART, expected similarity to other modes, comparison of BART, automobile and bus, intended use of BART, types of BART lines, the BART car, BART stations, and the construction period. Appendices include a copy of the interview instructions and schedule.			
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1. Report No.	2. Government Accession No. PB 236 738/AS	3. Recipient's Catalog No.	
4. Title and Subtitle BART Traveler Environment: Environmental Assessment Methods for Stations, Lines, and Equipment (Volume II of Part II, Traveler Study)		5. Report Date May 31, 1973	6. Performing Organization Code
7. Author(s) Donald Appleyard, Frances Carp, H. E. Abell, I.U.R.D., University of Calif., Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. UMTA technical Studies Grant CA-09-0020
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-I Report	14. Sponsoring Agency Code
15. Supplementary Notes			
16. Abstract This report concentrates on the development of methods for describing and assessing the BART traveler's environment -- the stations, system-wide components, cars, and lines -- in a form that can be validated by the traveler's response. It describes in detail the assessment system and the method for empirical testing. Chapters include environmental qualities (station indicators), station assessments, a line assessment system, automatic fare-collection assessment, and assessment of the BART car.			
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1. Report No.	2. Government Accession No. PB 236 737/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Analysis of BART Traveler Inquiries (Volume III of Part II, Traveler Study)		5. Report Date May 31, 1973	
		6. Performing Organization Code	
7. Author(s) Donald Appleyard, Frances Carp, Wendy Bertrand, Richard Zawadski, I.U.R.D., University of Calif., Berk.		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. UMTA Technical Studies Grant CA-09-0020	
12. Sponsoring Agency Name and Address U. S. Department of Transportation and U. S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-I Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract The inquiry analysis project, presented in this report, attempts to document one facet of the traveler's early experience of BART by recording and analyzing questions the travelers asked the station agents. Chapters include method, product, and discussion. Three Appendices include schedules and listings of the data collected.			
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1. Report No.	2. Government Accession No. PB 236 739/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Travel Demand Forecasting Study (Part III of BART I)		5. Report Date May 31, 1973	6. Performing Organization Code
		8. Performing Organization Report No.	
7. Author(s) Daniel McFadden, Michael Johnson, Fred Reid, I.U.R.D., University of California, Berkeley		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		11. Contract or Grant No. UMTA Technical Studies Grant CA-09-0020	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-I Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report summarizes the results of Phase One (pre-BART) of the travel demand forecasting study -- the collection of pre-BART data from a household survey, with a coordinated collection of data on travel time and costs. Chapters include sample design and field results, the study interview forms, trip report forms, auto travel times for selected trips in the BART Service area, and calculation of transit-trip descriptions. Appendix B (see I.7 below) describes the model to be applied and tested in Phase Two of the study.			
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1. Report No.	2. Government Accession No. PB 236 735/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Sample Design and Field Results of the Traveler Study (Appendix A of BART I)		5. Report Date May 31, 1973	
		6. Performing Organization Code	
7. Author(s) William L. Nicholls II I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. UMTA Technical Studies Grant CA-09-0020	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-I Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report, prepared by the Survey Research Center, describes the sampling methods and summarizes the field results of the traveler study directed by Donald Appleyard. It is divided into six sections -- objectives and overall strategy, population definition, sampling fractions and stratification, selection of tracts, blocks, and housing units, screening, subsampling and respondent selection, and weighting. A map of the study area is also included.			
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1. Report No.	2. Government Accession No. PB 236 740/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Summary and Working Papers BAS-1 Unmet Travel Needs Study (Appendix C of BART I)		5. Report Date May 31, 1973	
		6. Performing Organization Code	
7. Author(s) Donald L. Foley I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
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12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-I Report	
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16. Abstract This report presents an analysis of the Bay Area Survey No. I to delineate the nature and extent of "Transportation Disadvantage" in terms of the categories and location of persons who lack access to motor vehicles. It consists of two papers -- auto non-availability as a component of Transportation Disadvantage, a pre-BART review of the Bay Area situation and national context (D.L. Foley and J. Redwood), and differentials in personal access to Household Motor Vehicles, Five-County San Francisco Bay Area (D.L. Foley).			
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SECTION II. Pre-BART Data Collection

BART II: Pre-BART Studies of Environment, Land Use, Retail Sales

This series of documents was produced for the Metropolitan Transportation Commission by the Pre-BART data collection projects conducted by the Institute of Urban and Regional Development, University of California, Berkeley.

1. Report No.	2. Government Accession No. PB 236 727/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Overview and Summary (Part I of BART II)		5. Report Date June 29, 1973	
		6. Performing Organization Code	
7. Author(s) I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		11. Contract or Grant No. OST-DOT-OS-20093	
		13. Type of Report and Period Covered BART-II Report	
14. Sponsoring Agency Code		15. Supplementary Notes	
16. Abstract This report is a summary of the work undertaken under the BART-II contract with the University of California, Berkeley Institute of Urban and Regional Development, dealing primarily with selected aspects of environmental effects, land use, and retail sales. Chapters include background to the BART impact studies and a discussion of the nature and conduct of the BART-II studies. Also included are an outline of the administrative organization, a list of participants in the conduct of the studies, a list of related papers and reports, and a listing of data products.			
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1. Report No.	2. Government Accession No. PB 236 728/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Validation Check of Systemwide Social and Demographic Data (Volume I of Part II, Residential Environment Impact Study)		5. Report Date June 29, 1973	
7. Author(s) Frances Carp, Donald Appleyard, Hossein Shokrkon, Rick Zawadski, I.U.R.D., University of Calif., Berkeley		6. Performing Organization Code	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		8. Performing Organization Report No.	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		10. Work Unit No. (TRIS)	
15. Supplementary Notes		11. Contract or Grant No. DOT-DOT-OS-20093	
16. Abstract This report evaluates the validity of the sampling strategy and its implementation used in the System-wide Home Interview Survey random sample for the Residential Environment Impact Study. The study itself is outlined. Chapters include the rationale of the sampling strategy, procedure, results, discussion, implications, and suggestions for future data collection.		13. Type of Report and Period Covered BART-II Report	
17. Key Words		14. Sponsoring Agency Code	
18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161			
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1. Report No.	2. Government Accession No. PB 236 729/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Control Strategies (Volume II of Part II, Residential Environment Impact Study)		5. Report Date June 29, 1973	6. Performing Organization Code
		8. Performing Organization Report No.	
7. Author(s) Frances Carp, Donald Appleyard, Nathan King, Rick Zawadski, Hossein Shokrkon, I.U.R.D., U.C., Berkeley		10. Work Unit No. (TRAIS)	11. Contract or Grant No. OST-DOT-OS-20093
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		13. Type of Report and Period Covered BART-II Report	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report documents the need for using controls in a study such as the residential impact study, and discusses the special problems encountered with regard to controls. It outlines the general research design and the two complementary branches of that design -- the system-wide random sample approach and the selected site approach, and it describes in detail the control strategy adopted for each branch. Also included is a review of some research design problems inherent in impact studies in general. The two sections are -- methodological demands in assessing BART's impact and methodological demands of instrument development.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
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1. Report No.	2. Government Accession No. PB 236 730/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Residential Quality Prior to the Opening of BART (Volume III of Part II, Residential Environment Impact Study)		5. Report Date June 29, 1973	
		6. Performing Organization Code	
7. Author(s) Frances Carp, Hossein Shokrkon, Rick Zawadski I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		11. Contract or Grant No. OST- DOT-OS-20093	
		13. Type of Report and Period Covered BART-II Report	
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16. Abstract This report is an account of the efforts at empirical definition of the factors involved in residents' perception of environmental quality by means of verbal response indicators. It includes a discussion of the problem of environmental quality and the need for environmental indicators, and a detailed Overview and Summary of the BART Residential Impact Study. Chapters include -- developing dimensions of residential quality, discussion, future work on empirical dimensions, identifying the determinants of residential quality, and future work to identify determinants and add indicators.			
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1. Report No.	2. Government Accession No. PB 236 731/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Rationale and Procedure for the Collection of Pre-BART Geographic, Census, and Secondary Data for the System-Wide Strategy (Volume IV of Part II, Residential Environment Impact Study)		5. Report Date June 29, 1973	6. Performing Organization Code
7. Author(s) Frances Carp, Donald Appleyard, Marti Thuleen, Chris Christian, I.U.R.D., University of Calif., Berk.		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRIS)	11. Contract or Grant No. OST- DOT-OS-20093
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-II Report	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This report presents the rationale and procedure for the collection of the geographic, census and secondary data used in the assessment of BART's impacts on the residential environment. It includes an outline and overview of the residential impact study, especially the system-wide branch of the study, and a detailed discussion of the variables of interest to the study. Chapters include discussions of the use of the data in developing criteria of environmental quality and of the procedure for gathering and coding data. Five Appendices give details of coding instructions for secondary data.			
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1. Report No.	2. Government Accession No. PB 236 732/AS	3. Recipient's Catalog No.
4. Title and Subtitle Preparation of the Pre-BART Data File for the Systemwide Sample (Volume V of Part II, Residential Environment Impact Study)	5. Report Date June 29, 1973	6. Performing Organization Code
7. Author(s) Frances Carp, Donald Appleyard, Chris Christian, Laura MacEachen, Marti Thuleen, I.U.R.D., U.C., Berkeley	8. Performing Organization Report No.	10. Work Unit No. (TRAIS)
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705	11. Contract or Grant No. DOT-OS-20093 OST-	13. Type of Report and Period Covered BART-II Report
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.	14. Sponsoring Agency Code	
15. Supplementary Notes		
16. Abstract This report describes the data manipulation done in preparation for statistical analysis of data collected in the pre-BART responses to the environment study. The scope of the report includes data reformatting, reassignment of nonsubstantive response data, correction of errors, preparation of the data file, and data availability. Three Appendices list the specific data changes that were made.		
17. Key Words	18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 38
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1. Report No.	2. Government Accession No. PB 236 733/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Rationale and Procedures for Collection of Behavioral and Environmental Data (Volume VI of Part II, Residential Environment Impact Study)		5. Report Date June 29, 1973	
		6. Performing Organization Code	
7. Author(s) Donald Appleyard, Robert Betts, David Christensen Susan Shea Ridge, I.U.R.D., Univ. of Calif., Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		11. Contract or Grant No. OST- DOT-OS-20093	
		13. Type of Report and Period Covered BART-II Report	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This report presents the rationale for the collection of behavioral and environmental survey data for the Residential Impact Study and documents the procedures used to collect this data. It places these surveys in the overall Research Design by outlining the study's two strategies with special attention to the "special site" strategy of which these surveys are a part. The environmental qualities, which form the basis of all the data collection, are introduced. The Environmental and Behavioral Surveys and also the Resident Interview are each discussed. The development of the surveys and the field data collection methods are presented, and each of the environmental qualities is discussed in terms of the specific environmental and behavior measures related to it. These are followed by a preliminary evaluation of the survey procedures and recommendations for the future.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 296	22. Price \$11.50

1. Report No.	2. Government Accession No. PB 236 741/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Econometric Studies (Volume I of Part III, Land Use and Investment Study)		5. Report Date June 29, 1973	
		6. Performing Organization Code	
7. Author(s) Douglass Lee, Paulo Viera Da Cunha, Donald Clemons, I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAI5)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		11. Contract or Grant No. OST- DOT-OS-20093	
		13. Type of Report and Period Covered BART-II Report	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract The first part of the Land Use Investment Study presents the collection and preliminary analysis of econometric data on land prices in portions of the Bay Area (homogeneous neighborhoods in Central Contra Costa County). Chapters include -- summary and conclusions; cross-sectional studies (methodology, data, and analysis and interpretation); longitudinal studies (data, and analysis and interpretation); and recommendations.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 108	22. Price \$5.25

1. Report No.	2. Government Accession No. PB236 742/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Key Informant Interviews (Volume II of Part III, Land Use Investment Study)		5. Report Date June 29, 1973	6. Performing Organization Code
7. Author(s) Douglass Lee, Norman Cassells, Bruce Cousins, I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-20093 OST-
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-II Report	14. Sponsoring Agency Code
15. Supplementary Notes			
16. Abstract This report presents the results of key informant interviews with realtors, developers, bankers, and other participants in the land development process. It includes a summary and conclusions, and discussions of the development process and its participants, the interviews, methodology, and recommendations.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 74	22. Price \$4.75

1. Report No.	2. Government Accession No. PB 236 743/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Case Studies (Volume III of Part III, Land Use and Investment Study)		5. Report Date June 29, 1973	
		6. Performing Organization Code	
		8. Performing Organization Report No.	
7. Author(s) Douglass Lee, David Danning, Gerald Ridge, Konrad Stahl, Deborah Wiech, I.U.R.D., U.C., Berkeley		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		11. Contract or Grant No. OST- DOT-OS-20093	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-II Report	
14. Sponsoring Agency Code			
15. Supplementary Notes			
16. Abstract This volume covers case-study analysis of BART's impact on selected parcels of property from the standpoint of the real estate appraiser. It includes -- a summary and conclusions; the seventeen case studies preceded by a general description of case characteristics; and a discussion of the development of a methodology for estimating the dollar-value of the impact of a major public investment -- such as BART -- on a specific piece of real property.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
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1. Report No.	2. Government Accession No. PB 236 744/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Market Street Study (Volume IV of Part III, Land Use Investment Study)		5. Report Date June 29, 1973	6. Performing Organization Code
7. Author(s) Douglass Lee, Deborah Wiech I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. OST- DOT-OS-20093
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-II Report	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This study is an attempt to apply the methodology developed in Volume III for appraising the dollar-impact of BART on real properties to downtown San Francisco. The report establishes the framework of the study by presenting a discussion of the underlying theory of land use and of the economic characteristics of downtown development and by describing the study methodology. Results of a large number of case studies are presented and discussed in detail, summarizations of the data presented are made, and the effects of BART on downtown San Francisco are estimated.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 132	22. Price \$5.75

1. Report No.	2. Government Accession No. PB 236 745/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Pilot Land Use Information System: Walnut Creek (Volume V of Part III, Land Use and Investment Study)		5. Report Date June 29, 1973	
		6. Performing Organization Code	
7. Author(s) Douglass Lee, Harold Charns I.U.R.D., University of California, Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRIS)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		11. Contract or Grant No. OST- DOT-OS-20093	
		13. Type of Report and Period Covered BART-II Report	
14. Sponsoring Agency Code			
15. Supplementary Notes			
16. Abstract This report attempts to demonstrate the particular qualities that computer operation can offer in building a land use information system. It presents the pilot system whose purpose is monitoring the land use and related activities around the Walnut Creek BART Station. Chapters include map construction, data collection, retrieval and display, system development, and costs.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 51	22. Price \$4.25

1. Report No.	2. Government Accession No. PB 236 746/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Impacts of BART on Prices of Single Family Residences (Volume VI of Part III, Land Use and Investment Study)		5. Report Date June 29, 1973	6. Performing Organization Code
		8. Performing Organization Report No.	
7. Author(s) Douglass Lee, Donald Clemons, R. David Minister, I.U.R.D., University of Calif., Berkeley		10. Work Unit No. (TRAIS)	11. Contract or Grant No. OST- DOT-OS-20093
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		13. Type of Report and Period Covered BART-II Report	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report presents a statistical analysis of the effect of the anticipation of BARR service on sales values of single family homes in Central Contra Costa County. Chapters include discussion of longitudinal residential samples, cross-sectional residential samples, and a commercial sample, and conclusions.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages	22. Price \$4.25

1. Report No.	2. Government Accession No. PB 236 747/AS	3. Recipient's Catalog No.	
4. Title and Subtitle BART Impact On Retail Sales (Part IV of BART II)		5. Report Date June 29, 1973	
		6. Performing Organization Code	
		8. Performing Organization Report No.	
7. Author(s) Louis P. Bucklin I.U.R.D., University of California, Berkeley		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		11. Contract or Grant No. OST- DOT-OS-20093	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered BART-II Report	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This report presents a study to determine the impact of BART on consumer shopping in the Bay Area. The first part establishes baseline data on retail sales in order to make possible eventual evaluation of post-BART alterations. The second part develops a questionnaire for use in measuring BART's effect upon consumers' attitudes toward and choices of different shopping centers. Chapters include an overview of the baseline studies, baseline study of retail sales, and the attitude study. A copy of the attitude questionnaire is included as an Appendix.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 51	22. Price \$4.25

1. Report No.	2. Government Accession No. PB 236 748/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Station and Channel Typology (Appendix A of BART II)		5. Report Date August, 1972	
		6. Performing Organization Code	
7. Author(s) Donald Appleyard, Frances Carp, Alan Bell, Robert Betts, Jay Kalter, Pesach Lupinsky, Stephen Marcus, Susan Ridge, I:U.R.D., Univ. of Calif., Berkeley		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		11. Contract or Grant No. DOT-OS-20093 OST-	
		13. Type of Report and Period Covered BART-II Report	
14. Sponsoring Agency Code		15. Supplementary Notes	
16. Abstract This Appendix, Interim Report No. 1 of the BART Residential Impact Study, presents a typology which characterizes the stations and channel segments of BART according to such variables as design characteristics and land uses. Chapters include selected sites, typology characteristics, and typology matrix. Includes photographs of each site.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 45	22. Price \$4.25

1. Report No.	2. Government Accession No. PB 236 749/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Pre-BART Interview Method and Data (Appendix B of BART II)		5. Report Date October, 1972	
		6. Performing Organization Code	
7. Author(s) Frances Carp, Donald Appleyard, Christopher Christian, Rick Zawadski, I.U.R.D., Univ. of Calif., Berk.		8. Performing Organization Report No.	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRIS)	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		11. Contract or Grant No. OST- DOT-OS-20093	
		13. Type of Report and Period Covered BART-II Report	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This report, Interim Report No. 2 of the BART Residential Impact Study. is a summary of the method and data collection for pre-BART interviews. It discusses the site-selection process and the geographic area designated for study; it presents the sampling strategy, and summarizes the data collection procedures, the type of data collected and the form, location and availability of data prior to analysis. A preliminary critique of the methodology is included. Over half the report is a copy of the interview and instructions.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 45	22. Price \$4.25

1. Report No.	2. Government Accession No. PB 236 750/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Data Documentation for the Land Use and Investment Study (Appendix C of BART II)		5. Report Date June 1973	
		6. Performing Organization Code	
		8. Performing Organization Report No.	
7. Author(s) Douglass Lee, Donald Clemons, Janet Corpus I.U.R.D., University of California, Berkeley		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		11. Contract or Grant No. OST- DOT-OS-20093	
		13. Type of Report and Period Covered BART-II Report	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract Contains a detailed description of the data items collected as a part of the study of pre-BART property value changes (reported in Volumes I and VI of BART II, Part III), and a study of office space in downtown San Francisco (Volume IV of BART II, Part III). Data descriptions include longitudinal real property sales (both residential and commercial), corss-sectional real property sales (residential), and the Market Street Survey (commercial). The latter 3/4 of the report consists of data listing and parcel maps.			
17. Key Words		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 102	22. Price \$5.25

SECTION III: Working Papers

Working Papers are reports of primarily methodological interest for dissemination to a restricted technical audience.

1. Report No. WP 1-1-74	2. Government Accession No. PB 235 045/AS	3. Recipient's Catalog No.	
4. Title and Subtitle An Initial Review of the Impacts of BART's Opening in San Francisco		5. Report Date January 1974	6. Performing Organization Code
		8. Performing Organization Report No. WP 1-1-74	
7. Author(s) Andree Abecassis	9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS)
12. Sponsoring Agency Name and Address U.S. Department of Transportation and the U.S. Department of Housing and Urban Development		11. Contract or Grant No. DOT-OS-30176	
		13. Type of Report and Period Covered Working Paper	
14. Sponsoring Agency Code		15. Supplementary Notes	
16. Abstract This paper presents a set of observations on the events surrounding the inauguration of BART's West Bay service based largely on newspaper articles, press releases, interviews, and, in a couple of instances, on *Mini-Surveys* conducted by BART and MTC. Its purpose is to give a feel for the kinds of impacts BART can be expected to have on the Bay Area. Its findings are not meant to be conclusive or scientifically defensible but to serve, perhaps, as *Path-Finders* for future in-depth studies. Topics include festivity day (Nov. 3, 1973), opening day (Nov. 5, 1973), the grand tour to Daly City-- the new *in* thing, the Daly City parking crunch, other BART related impacts from the West Bay service (on other means of public transportation and on real estate values), and a summary.			
17. Key Words Opening Overall BART Impact Real Estate Values West Bay		18. Distribution Statement Daly City Impacts Working Paper Parking Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 35	22. Price \$5.00

1. Report No. WP 1-3-74	2. Government Accession No. PB 235 046/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Sampling and Field Work Methods of the 1973-74 BART Impact Travel Survey		5. Report Date July 1974	
		6. Performing Organization Code	
7. Author(s) William L. Nicholls II, Survey Research Center		8. Performing Organization Report No. WP 1-3-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DOT-OS-20093 DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report summarizes the survey methods of BITS 73-74 (also known as the more before survey). The report is divided into two main sections-- a formal description of the survey's sampling, field work, and processing methods, and presentation of conclusions about the survey's validity and reliability and additional information that may aid survey analysis in the interpretation of the data. Three Appendices are attached-- a list of additional sampling, field work, and coding documents which are available at the Survey Research Center's Data Library and at MTC, facsimiles of the introductory letters mailed to sample households prior to interviewing: A series of maps showing the boundaries of the four study areas and of the time zones within them.			
17. Key Words Pre-BART, Travel, Behavior, More-Before, Survey, Sample		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 125	22. Price \$10.00

1. Report No. WP 2-1-74	2. Government Accession No. PB 235-047/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Travel Time Networks Data Base For the BART Impact Study		5. Report Date January 1974	
		6. Performing Organization Code	
		8. Performing Organization Report No. WP 2-1-74	
7. Author(s) Fred A. Reid		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This paper examines the quality requirements of Travel -Time Data for household level demand modelling in the BART impact study in terms of its accuracy, its spatial and temporal (clock dependent) grain, and its scope. It deals with trip-scale data. The effect on a demand forecast is calculated for some possible errors in the data from different forms of source travel-time network files to give a result oriented measure of what is required of the data. It is found that the use of zonal averages for transit access variables or failure to account for the scheduling of trips near peak periods can result in significant forecasting errors.			
17. Key Words Transit, Forecasting, Working Paper, Access, Demand, Work Travel, Data Base, Travel, Travel Time, Network		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 9	22. Price \$4.00

1. Report No. WP 3-1-74	2. Government Accession No. PB 235 048/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Role of Personal Security in the BART Impact Program		5. Report Date January 1974	
		6. Performing Organization Code	
7. Author(s) Michael Johnson		8. Performing Organization Report No. WP 3-1-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, Ca. 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This Working Paper discusses research on personal security, done as part of the BART Impact Program, which addresses the subject of security from crime and anti-social behavior from two points of view-- (1) the risk of crime is an impedence to travel--data on travel security, real and perceived, should be collected and employed in the analysis and interpretation of BART's impact on travel. (2) Security of one's person and property, in and around one's home is an element of residential quality and should be considered in an evaluation of BART's impacts on the Environment. This report presents the main accomplishments so far of the BART Impact Program in dealing with security. It includes questions from various surveys which either directly raise the issue of security or offer an open-ended opportunity for mention of it, the results that are so far available, excerpts from *BART Traveler Environment-- Environmental Assessment Methods for Stations, Lines, and Equipment* (Donald Appleyard, Frances Carp, and H.E. Abell, Jr., IURD, U.C., Berkeley, 1973) which deal with the assessment of security, and the detailed approaches to the security problem that were presented by Contractors chosen for the Transportation System and Travel Behavior Task and the Environment Task.			
17. Key Words Environment, Overview, Crime, Quality, Program-Wide, Overall BART Impact, Security		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 83	22. Price \$7.75

1. Report No. WP 4-1-74	2. Government Accession No. PB 235-049/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Identification and Appraisal of Methodology for Assessing the Public Policy Impacts of BART		5. Report Date April 1974	
		6. Performing Organization Code	
7. Author(s) Morris Shepard, Shepard Associates, Inc.		8. Performing Organization Report No. WP 4-1-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract As one of the six major projects of the BART Impact Program, the Public Policy Task poses its share of methodological problems. Paramount among these research related problems is the nascent stage of public policy research. Most experts, explicitly or implicitly state that the state-of-the-art is not well developed. To assist in the resolution of this dilemma, as part of the Public Policy Methodology Task, it has been necessary to survey the existing literature in public policy and then relate the tested research techniques to the goals of the Public Policy Task. Given the above purpose, the theme of this report is to relate the anticipated cost and value. Overriding this basic theme, however, is the general problem of the nascent stage of public policy research. There are many grand theories, models and other heuristic devices, as well as assertions about how to conduct policy research, but there are no extant empirically-based studies of the magnitude which is being proposed here.			
17. Key Words Survey, Public Policy, Working Paper, Impacts, Methodology		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 39	22. Price \$5.75

1. Report No. WP 5-1-74		2. Government Accession No. PB 235 050/AS		3. Recipient's Catalog No.	
4. Title and Subtitle The BART Line-Site Typology: A Factor Analysis of Line-Site Data				5. Report Date May 1974	
				6. Performing Organization Code	
				8. Performing Organization Report No. WP 5-1-74	
7. Author(s) Frances Carp and Rick Zawadski				10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705				11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U. S. Department of Transportation and U. S. Department of Housing and Urban Development Washington, D.C.				13. Type of Report and Period Covered Working Paper	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract This paper reports the results of a factor analysis conducted to determine the basic variance from site to site in the data items collected throughout the BART system, based on the systemwide sample of the Urban Residential Environment study. These validation procedures have implications for the next collection of data in choosing the special sites to be studied. Fourteen meaningful dimensions emerged from a factor analysis of 55 physical areas. These are discussed and tables of the studied variables and the resulting factors are included.					
17. Key Words Selected Sites, Working Paper, Dimensions, Factor Analysis				18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A		20. Security Classif. (of this page) N/A		21. No. of Pages 8	
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1. Report No. WP 6-1-75	2. Government Accession No. PB 244 683/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Factor Analysis of the Systemwide Respondent, Geographic, Census and Land Use Variables		5. Report Date July 1974	
		6. Performing Organization Code	
7. Author(s) Frances M. Carp and Rick T. Zawadski		8. Performing Organization Report No. WP 6-1-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report presents the rationale behind a factor analysis of selected respondent, geographic, census and land use variables from the pre-BART systemwide sample for the Urban Residential Environmental Impact study. It describes the sample, the variables and the statistical procedures used in that analysis and finally it presents the resultant factors and offers some suggestions for their utilization.			
17. Key Words Factor Analysis, Pre-BART, Census, Interview, Residential, Systemwide, Land Use, Environment, Geographic, Sample		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 15	22. Price \$3.75

1. Report No. WP 7-1-75	2. Government Accession No. PB 237 356/AS	3. Recipient's Catalog No.	
4. Title and Subtitle The Social Consequences of BART's Environmental Impact: Some Preliminary Considerations and Hypotheses		5. Report Date October 1974	6. Performing Organization Code
		8. Performing Organization Report No. WP 7-1-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
		13. Type of Report and Period Covered Working Paper	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		14. Sponsoring Agency Code	
		15. Supplementary Notes	
16. Abstract The Working Paper draws attention to some of the social consequences of Environmental perturbations caused by the construction of the Bay Area Rapid Transit (BART) System. A series of hypotheses is developed to illustrate the interaction of environmental perturbations and the development of attitudes and behavior that enhance the self-perceived status of individuals. Further research on environmental impacts taking the identified social factors into account is recommended.			
17. Key Words Environment, Impacts, BART, Rapid Transit Railway, Social, Behavior		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 14	22. Price \$3.25

1. Report No. WP 8-1-75	2. Government Accession No. PB 244 553/AS	3. Recipient's Catalog No.	
4. Title and Subtitle BART Impact Program Data Summary		5. Report Date July 1974	
		6. Performing Organization Code	
7. Author(s) Susan Bachman		8. Performing Organization Report No. WP 8-1-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAILS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This Working Paper is a guide to data collected for use by the BART Impact Program. For each data collection project it contains--(1) a short summary of the nature and purpose of the study, (2) a description of each type of data collected and the size of the data set, (3) the time period represented by the data, (4) the geographic location of the data collection and (5) a list of the data items and reports which are presently available and catalogued at MTC and the Data Catalog I.D. Words by which the items may be referenced. The Appendix includes study area maps, matrices of data collection by BART station area, and the BART Impact Data Catalog Table of Contents.			
17. Key Words Data, Overall BART Impact, BART, Summary, Geographic		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 39	22. Price \$4.25

1. Report No. WP 10-1-75	2. Government Accession No. PB 237 357/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Methodological Approach for Defining the Generalized No-BART Alternative (GNBA)		5. Report Date October 1974	6. Performing Organization Code
		8. Performing Organization Report No. WP 10-1-75	
7. Author(s) Stephen R. Rosenthal		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		13. Type of Report and Period Covered Working Paper	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract The Generalized No-BART Alternative is the hypothetical transportation system judged most likely to have resulted in the Bay Area in FY 1976 if BART had not come into existence. The purpose of this Working Paper is to explain how MTC intends to define the GNBA and the role to be played in this process by findings from the Decision History of BART. It is structured in three parts-- (1) Introduction to Basic Concepts and Criteria, (2) Overview of Methodological Approach and Guidelines for Implementation, and (3) Application of Criteria for Defining the GNBA.			
17. Key Words Methodology, No-BART Alternative		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 20	22. Price \$3.25

1. Report No. WP 11-1-75		2. Government Accession No. PB 239 062/AS		3. Recipient's Catalog No.	
4. Title and Subtitle Transit Passenger Counts: Errors, Controls, Analysis		5. Report Date November 1974			
		6. Performing Organization Code			
7. Author(s) Andrew Ungar		8. Performing Organization Report No. WP 11-1-75			
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)			
		11. Contract or Grant No. DOT-OS-30176			
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper			
		14. Sponsoring Agency Code			
15. Supplementary Notes					
16. Abstract This paper reports work performed to determine the accuracy of two methods of counting bus riders (by onboard and by roadside observers), and to provide estimates of the errors inherent in the procedures. Bus riders were counted by both methods at selected locations on a screen line in San Francisco. Based on statistical estimates of error, it was concluded that the standard counting procedure, using roadside observers, contributed relatively little to the overall variability of the data. The largest source of variation, and the one that controlled required sample sizes, was the normal fluctuation of ridership between buses. It was estimated that five-day samples taken in two observation periods would be required to permit the detection, on the average, of a 10 PCT. change in total daily ridership crossing a single screen line station. Pooling data would permit the detection of smaller differences. The analysis also led to improved control of field procedures and data quality.					
17. Key Words Methodology, Passenger, Statistical Analysis, Counts, Transit, Occupancy			18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161		
19. Security Classif. (of this report) N/A		20. Security Classif. (of this page) N/A		21. No. of Pages 51	
				22. Price \$4.25	

1. Report No. WP 12-1-75	2. Government Accession No. PB 239 211/AS	3. Recipient's Catalog No.	
4. Title and Subtitle BART and the Handicapped		5. Report Date November 1974	
		6. Performing Organization Code	
7. Author(s) Robert Levine		8. Performing Organization Report No. WP 12-1-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract A ten-year review of BART's decisions regarding special system facilities for the handicapped shows a gradual awareness of these needs as citizen pressure mounted. As a result, special facilities for the visually and audibly disabled are not provided and, as an early comprehensive plan of station elevator sites did not exist, many elevators are awkwardly located. A study team using the system in August, 1974, found many minor elevator operational problems sufficient enough to discourage use. An additional barrier for wheelchair users is the lack of level access into and out of buses that provide transfer to BART. From a larger planning viewpoint, however, BART has taken the responsibility of providing the long-haul section of a regional trip for the handicapped and has set a planning precedent.			
17. Key Words Transit, Handicapped, Access, Facilities, BART		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 58	22. Price \$4.25

1. Report No. WP 13-5-75	2. Government Accession No. PB 242 440/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Survey of Data Sources for the Land Use and Urban Development Project		5. Report Date June 1975	
		6. Performing Organization Code	
7. Author(s) Andrejs Skaburskis		8. Performing Organization Report No. WP 13-5-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRIS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation Office of Transportation Planning Assistance Washington, D.C.		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report identifies data sources which appear relevant to the study of BART's impacts on land use. The purpose of this report was to help design a Research Plan for the BART Impact Program Land Use Project. Thirty-seven data sources are described in detail. Use of the data and some analytical methods are described.			
17. Key Words BART Impact Land Use Impact Land Use Data Bay Area Rapid Transit (BART)		18. Distribution Statement Document is available to the public through National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 65	22. Price \$4.25

1. Report No. WP 14-3-75	2. Government Accession No. PB 248 118/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Analysis of BART's Energy Consumption for Interim System Operations		5. Report Date June 1975	
		6. Performing Organization Code	
7. Author(s) Stephen G. Cohn, Raymond H. Ellis Peat, Marwick, Mitchell & Co.		8. Performing Organization Report No. WP 14-3-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DOT-OS-30176 CA-09-0025, CA-09-0042	
12. Sponsoring Agency Name and Address Office of Transportation Planning Assistant Urban Mass Transportation Administration U. S. Department of Transportation 400 Seventh St., S.W., Washington, D.C. 20596		13. Type of Report and Period Covered Working Paper	
		14. Sponsoring Agency Code	
15. Supplementary Notes The Metropolitan Transportation Commission (MTC), Hotel Claremont, Berkeley, CA 94705, is the prime contractor for the BART Impact Program. Peat, Marwick, Mitchell & Co., 1777 Murchison Dr., Burlingame, CA 94010 is the sub-contractor to MTC responsible for the Transportation System & Travel Behavior Project.			
16. Abstract The Bay Area Rapid Transit (BART) System is the first areawide rail rapid transit system to be built in the United States in 50 years. This system includes 71 miles of track, 34 stations, and such technological advancements as a regenerative braking system plus light, all aluminum cars designed for high acceleration and maximum speeds of 80 miles per hour. This study investigates the historical energy consumption of the BART System, estimates BART's energy consumption for ultimate design service levels (approximately twice the present level), and compares BART's energy consumption to that of other rail transit systems and alternate modes.			
17. Key Words Bay Area Rapid Transit (BART) System, BART Impact Program, energy consumption, rail rapid transit, urban transportation		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 18	22. Price \$4.00

1. Report No. WP 15-3-75		2. Government Accession No. PB 244 088/AS		3. Recipient's Catalog No.	
4. Title and Subtitle Exploratory Network Analyses of BART's Impacts Upon Accessibility		5. Report Date July 1975		6. Performing Organization Code	
7. Author(s) Henry S. L. Fan, Alistair Sherret Peat, Marwick, Mitchell & Co.		8. Performing Organization Report No. WP 15-3-75		9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont, Berkeley, CA 94705	
12. Sponsoring Agency Name and Address U.S. Department of Transportation, Office of Planning Assistance, and Urban Mass Transit Administration		10. Work Unit No.		11. Contract or Grant No. DOT-OS-301-7 CA-09-0025, CA-09-0042	
15. Supplementary Notes The Metropolitan Transportation Commission (MTC), Hotel Claremont, Berkeley, California, is the prime contractor for the BART Impact Program. Peat, Marwick, Mitchell & Co., 1777 Murchison Drive, Burlingame, California, is the subcontractor for MTC responsible for the Transportation System and Travel Behavior Project		13. Type of Report and Period Covered Working Paper		14. Sponsoring Agency Code	
16. Abstract The objective of the study was to (1) make a preliminary assessment of BART's impacts on areawide accessibility, and (2) evaluate the use of network-based accessibility measures as an impact analysis technique. Accessibility measures were based on estimates of zone-to-zone travel times and transit fares derived from networks developed for the 1971 "pre-BART" and 1976 "post-BART" highway and transit systems. The accessibility measures were expressed as simple indices, weighted by the size and characteristics of the resident population in the origin zone. Comparisons of the accessibility indices were made for both peak and off-peak travel times for selected destination zones in the BART service area. The selected zones represent the locations of important employment centers, shopping facilities, and hospitals. Assessments were made of BART's potential accessibility impacts on the racial minority, elderly, and low-income populations as well as the general population.					
17. Key Words Bay Area Rapid Transit (BART) System, BART Impact Program, public mass transit, rail rapid transit, urban transportation, program evaluation, network accessibility indices.			18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 46	
				22. Price \$4.75	

1. Report No. WP 17-1-75	2. Government Accession No. PB 247 709/AS	3. Recipient's Catalog No.	
4. Title and Subtitle The Bay Area Rapid Transit System - Current Status and Impacts		5. Report Date August 1975	6. Performing Organization Code
		8. Performing Organization Report No. WP 17-1-75	
7. Author(s) Paul Bay and Joel Markowitz	9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS) 11. Contract or Grant No. DOT-OS-30176
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.	13. Type of Report and Period Covered Working Paper		14. Sponsoring Agency Code
15. Supplementary Notes			
16. Abstract This report reviews the history of the BART system, describes the kind of service the system provides, discusses the difficulties of impact measurement, reports the early findings about BART's effects on travel, and describes how BART is seen by residents and policy-makers of the area. The Bay Area Rapid Transit has only been in operation on all of its lines since September 1974. The inherent design of the system as a long-distance, commuter rail facility means that BART by itself could not possibly live up to some of the inflated expectations held for it, nor produce some of the dramatic impacts which had been predicted. As BART solves its operational problems, it will become a key element in the total regional transportation system of the Bay Area, and is likely to prove to have been worth its cost.			
17. Key Words Bay Area Rapid Transit (BART) System, BART Impact Program, Public Mass Transit, Rail Rapid Transit, Urban Transportation, Program Evaluation		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 29	22. Price \$4.00

1. Report No. WP 18-1-75	2. Government Accession No. PB 247 708/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Data Needs for Measuring the Impacts of New Transportation Systems: The BART Experience		5. Report Date August, 1975	6. Performing Organization Code
7. Author(s) Joel Markowitz and Marilyn Reynolds		8. Performing Organization Report No. WP 18-1-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAI5)	11. Contract or Grant No. DOT-OS-30176
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Working Paper	
14. Sponsoring Agency Code			
15. Supplementary Notes			
16. Abstract The early experience of the BART Impact Program suggests that this type of evaluation program might better concentrate on depth than breadth in its data collection and analytical activities. This recognizes the difficulties in studying impacts of small relative magnitude in an environment that is complex and dynamic. Research resources must be devoted foremost to the uncovering of the underlying causal mechanisms eliciting what we call "impacts". A misdirection toward the collection of a "comprehensive" data base is both wasteful of resources and is likely to force only superficial coverage of important issues.			
17. Key Words Bay Area Rapid Transit (BART) System, BART Impact Program, Public Mass Transit, Rail Rapid Transit, Urban Transportation, Program Evaluation, Data Requirements		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 14	22. Price \$3.50

SECTION IV. Planning Documents

This series of miscellaneous documents includes study designs and project implementation plans intended for internal BART Impact Program use only, and research plans designed for dissemination to a more technical audience.

1. Report No. PD 3-1-74	2. Government Accession No. PB 237 309/AS	3. Recipient's Catalog No.	
4. Title and Subtitle A Review of Some Anticipated and Observed Impacts of the Bay Area Rapid Transit System		5. Report Date May 1974	6. Performing Organization Code
		8. Performing Organization Report No. PD 3-1-74	
7. Author(s) Peat, Marwick, Mitchell & Co.		10. Work Unit No. (TRIS)	11. Contract or Grant No. DOT-OS-30176
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		13. Type of Report and Period Covered Planning Document	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract A brief summary of the most important impacts of the Bay Area Rapid Transit System, from a survey of the technical and non-technical literature. This report, prepared as a planning guide and reference for the BART Impact Program, describes both early and recent anticipated and observed impacts. A table of such impacts, contrasting them as seen by observers in 1962 against the present is included. The report discusses the BART system itself, planned and actual, and impacts in the following areas-- Travel Behavior Environment Land Use and Urban Development Financial and Economic Institutions and Life Styles Public Policy Environment, Dimensions, Travel			
17. Key Words Time, Overall BART Impact, Taxes, Economics & Finance, Planning, Survey, Evaluation, Travel Costs, Real Estate Values, Anticipated Impacts, Inst. & Life Styles, Impacts, Quality, Comparison, Projections, Costs, Land Use, Public Policy		18. Distribution Statement DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 64	22. Price \$4.25

1. Report No. PD 10-6-75		2. Government Accession No. PB 240 267/AS		3. Recipient's Catalog No.	
4. Title and Subtitle Research Plan - Institutions and Life Styles Project				5. Report Date January, 1975	
				6. Performing Organization Code	
7. Author(s) Dr. Troy Duster, Dr. Claude Fischer Jefferson Associates				8. Performing Organization Report No. PD 10-6-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development				13. Type of Report and Period Covered Planning Document	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract Research plan outlining central institutions most likely to be affected by BART, most feasible for study, and most likely to produce findings of transferability to other settings for policy-related decisions. Second, selected aspects of various kinds of life styles are reviewed and suggestions and hypotheses presented for further study of both institutions and life styles (I&LS). The methodologies are designed to inter-connect from different angles in the study of the same problem, with a combination of ethnographic, observational, and survey research supplemented by document monitoring and analysis.					
17. Key Words Institutions and Life Styles, Social, Institutions, Research Plan, Methodology, Impacts, Life Styles				18. Distribution Statement Document is available to the public through the National Technical Information Service Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 43	
				22. Price \$3.75	

1. Report No. PD 14-3-75		2. Government Accession No. PB 242 439/AS		3. Recipient's Catalog No.	
4. Title and Subtitle Transportation System and Travel Behavior Project - Research Plan				5. Report Date May 1975	
				6. Performing Organization Code	
7. Author(s) Raymond H. Ellis, Richard D. Worrall, Alistair Sherret, Peat, Marwick, Mitchell & Co.				8. Performing Organization Report No. PD 14-3-75	
				10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705				11. Contract or Grant No. DOT-OS-30176 CA-09-0025, CA-09-0042	
				13. Type of Report and Period Covered Planning Document	
12. Sponsoring Agency Name and Address Office of Transportation Planning Assistance Urban Mass Transportation Administration U. S. Department of Transportation 400 Seventh St., S.W., Washington, D.C. 20590				14. Sponsoring Agency Code	
15. Supplementary Notes The Metropolitan Transportation Commission (MTC), Hotel Claremont, Berkeley, CA 94705 is the prime contractor for the BART Impact Program. Peat, Marwick, Mitchell & Co., 1777 Murchison Drive, Burlingame, CA 94010 is the sub-contractor to MTC responsible for the Transportation System & Travel Behavior Project.					
16. Abstract The Transportation System and Travel Behavior (TSTB) Project of the BART Impact Program will assess the impacts of BART upon the characteristics and performance of the Bay Area transportation system--including BART, parallel and complementary transit services, and the highway system--and the responses of travelers to BART and related transportation system changes, including traveler perceptions, attitudes and behavior. This report provides a strategic Research Plan for the entire TSTB Project. It includes discussion of a conceptual framework of the impacts processes, the major research questions to be addressed, the priorities for the research, the research methods, and finally, the major work elements of the TSTB Project.					
17. Key Words Bay Area Rapid Transit (BART) System BART Impact Program, public transportation, mass transit, rail rapid transit, travel behavior, urban transportation, program evaluation			18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, VA 22151		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 98	22. Price \$5.75

1. Report No. PD 17-5-75	2. Government Accession No. PB 247 767/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Land Use and Urban Development Project Research Plan		5. Report Date September, 1975	
		6. Performing Organization Code	
		8. Performing Organization Report No. PD 17-5-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS) 11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing and Urban Development		13. Type of Report and Period Covered Planning Document	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report defines the scope of the Land Use and Urban Development Project, identifies specific research issues, and outlines methods for performing the work. A theoretical framework encompassing the various anticipated land use impacts outlines the impact process and defines the basic concepts used in formulating the research approach. The Work Elements describing the specific work to be done are closely tied to the research issues identified in the theoretical framework. Details of data collection and analysis are contained in the Work Elements. The Research Plan outlines how the work will be performed by proposing a preliminary schedule, staffing requirements and estimates of level of effort.			
17. Key Words BART Impact Bay Area Rapid Transit (BART) Land Use Research Plan		18. Distribution Statement Document is available to the public through the National Technical Information Service (NTIS), Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 56	22. Price \$4.50

1. Report No. PD 22-7-76	2. Government Accession No. PB 250 719/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Development of Methodology for the Assessment of BART's Impacts Upon Economics and Finance Research Plan		5. Report Date March, 1975	6. Performing Organization Code
		8. Performing Organization Report No. PD 22-7-76	
7. Author(s) Joel Bergsman, Thomas Muller, The Urban Institute Robert McGillivray and Harvey A. Garn (revised by MTC)		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered Planning Document	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This is a research plan for the Economics and Finance Project, one of the six major components of the BART Impact Program, a comprehensive, policy-oriented study and evaluation of the impacts of the San Francisco Bay Area's new rapid transit system. The Economics and Finance Project will determine the impacts of the construction of BART, the transportation service it provides, and the bond issues and taxes that finance it, on the regional economy and on specific economic sectors. It will also assess impacts on employment, productivity, business activity, the cost of public borrowing, public willingness to incur debt for other purposes, and the distribution of tax burdens among socioeconomic sectors of the population. In the Research Plan, one or more work elements are defined for each of the enumerated factors. The discussion of each element includes a description of a model of the determinants of the impact, expectations as to measurability of the impacts, a consideration of alternative study methodologies, and a recommendation of a preferred methodology.			
17. Key Words Economics, Finance, research plan, methodology, economic impact, BART Impact Program, Bay Area Rapid Transit (BART), rapid transit system program evaluation, impact studies		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 38	22. Price \$4.00

1. Report No. PD 23-8-76	2. Government Accession No. PB 251 697/AS	3. Recipient's Catalog No.	
4. Title and Subtitle PUBLIC POLICY PROJECT RESEARCH PLAN		5. Report Date APRIL, 1976	6. Performing Organization Code
		8. Performing Organization Report No. PD 23-8-76	
7. Author(s) HENRY BAIN, FRANCEEN LYONS		10. Work Unit No. (TRAI5)	11. Contract or Grant No. DOT-OS-30176
9. Performing Organization Name and Address METROPOLITAN TRANSPORTATION COMMISSION HOTEL CLAREMONT BERKELEY, CALIFORNIA 94705		13. Type of Report and Period Covered Planning Document	
12. Sponsoring Agency Name and Address U.S. DEPARTMENT OF TRANSPORTATION AND U. S. DEPARTMENT OF HOUSING AND URBAN DEV. WASHINGTON, D. C.		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report defines the scope of the Public Policy Project, identifies specific research issues, and outlines methods for performing the work. A theoretical framework encompassing the various anticipated public policy impacts, outlines the impact process and defines the basic concepts used in formulating the research approach. The Work Elements describing the specific work to be done are closely tied to the research issues identified in the theoretical framework. Details of data collection and analysis are contained in the Work Elements. The Research Plan outlines how the work will be performed by proposing a preliminary schedule, staffing requirements and estimates of level of effort.			
17. Key Words BART IMPACT BAY AREA RAPID TRANSIT (BART) PUBLIC POLICY LOCAL GOVERNMENT RESEARCH PLAN		18. Distribution Statement This document is available to the public through the National Technical Information Service (NTIS) Springfield, Virginia 22161	
19. Security Classif. (of this report) UNCLASSIFIED	20. Security Classif. (of this page) UNCLASSIFIED	21. No. of Pages 41	22. Price \$4.00

SECTION V. Technical Memoranda

These reports describe the analyses and impact findings in specific areas of inquiry and are intended for wide dissemination to planners and researchers.

1. Report No. TM-1-1-74	2. Government Accession No. PB-235 037/AS	3. Recipient's Catalog No.	
4. Title and Subtitle MTC BART Impact Program Report Catalog		5. Report Date Dec. 1973	6. Performing Organization Code
		8. Performing Organization Report No. TM-1-1-74	
7. Author(s) Susan Bachman, Marilyn Reynolds		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address U. S. Department of Transportation Washington, D. C.		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This catalog contains abstracts of the reports produced by the Pre-BART data collection projects conducted at the University of California, Berkeley for MTC (BART I and BART II). It will be added to as more reports are generated by the phases of the program that are getting underway at this time. New versions of this catalog will be made available as updates are made.			
17. Key Words BART, overview, traveler, attitude perceptions, environmental, assessment		18. Distribution Statement Document is available to the public through the National Information Services, Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 13	22. Price \$4.00

1. Report No. TM-2-1-74	2. Government Accession No. PB 235 038/AS	3. Recipient's Catalog No.	
4. Title and Subtitle BART Impact Vehicle and Person-Movement Study: Collection Methodology for Pre-BART Data		5. Report Date March 1974	6. Performing Organization Code
		8. Performing Organization Report No. TM-2-1-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report documents the methodology used to collect vehicle- and person-movement data for the Bay Area Rapid Transit (BART) Impact Program in the period prior to BART revenue operations. The report describes the organization and procedures followed in collecting the data, including types, locations, dates and duration of counts. It also describes jurisdictional responsibility, coordination of public and private agencies involved, and cost estimates.			
17. Key Words Fremont Line, Richmond-Concord and Transbay Line, San Francisco Lines		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 31	22. Price \$8.75

1. Report No. TM 3-1-74	2. Government Accession No. PB-235 039/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Empirical Dimensions of Environmental Quality Refinement and Measurement		5. Report Date January 1974	6. Performing Organization Code
		8. Performing Organization Report No. TM 3-1-74	
7. Author(s) Frances M. Carp		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address U.S. Dept. of Transportation U.S. Dept. of Housing and Urban Development		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report serves two purposes: (1) to describe a set of data which is filed at the MTC and (2) to suggest work which might be undertaken. The work proposed is to pursue development of measures of residential-area quality in order to have an improved instrument ready for the next data collection.			
17. Key Words Pre-BART, survey, measurement, residential, quality, procedure, environment, dimensions, memorandum		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 10	22. Price \$4.00

1. Report No. TM 4-1-74	2. Government Accession No. PB-235 040/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Employed Women as a Transportation-Deprived and Transit-Dependent Group		5. Report Date January 1974	
		6. Performing Organization Code	
7. Author(s) Frances M. Carp		8. Performing Organization Report No. TM 4-1-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAFS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U. S. Dept. of Transportation U. S. Dept. of Housing and Urban Development		13. Type of Report and Period Covered Technical Memorandum	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract In the design of the BART Impact Travelers Study (Carp & Appleyard, 1973), housewives were specified as one of the transportation-deprived and transit-dependent population groups. However, review of the data suggested that this was not the case, at least among the East Bay respondents, with 98 percent of the housewives having "regular use of a car". This memorandum suggests that employed women, rather than housewives, are transit-dependent and that future steps of the study should turn attention to them instead. It gives statistical comparisons between the responses of the employed women, unemployed men, and housewives, to substantiate this suggestion.			
17. Key Words Pre-BART, employed, deprived, traveler, women, dependent, panel transportation, memorandum		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 13	22. Price \$4.00

1. Report No. TM 5-1-74	2. Government Accession No. PB-235 041/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Analysis of Modal Comparison Items in Pre-BART Travel Data		5. Report Date January 1974	6. Performing Organization Code
7. Author(s) Frances M. Carp		8. Performing Organization Report No. TM 5-1-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
12. Sponsoring Agency Name and Address U. S. Department of Transportation U. S. Department of Housing and Urban Development		13. Type of Report and Period Covered Technical Memorandum	
14. Sponsoring Agency Code			
15. Supplementary Notes			
16. Abstract In the pre-BART traveler interview prepared by Appleyard and Carp, a set of items asked the respondents to rate the automobile, the bus, and what they expected BART to be like on the same 24 characteristics as a means of obtaining comparable evaluations across the three transportation modes. The purpose of this present analysis is to produce information which would provide an empirical base for decisions regarding repetition of these modal-comparison items in the data collection instrument for MTC Bay Area Travel Survey, Fall, 1973. It does not deal with the issue of whether the set of items adequately covers the domain of modal-comparison parameters, but only with the candidacy of items in this set for inclusion in a new data-collection instrument.			
17. Key Words Pre-BART, employed, deprived, traveler, women, dependent, panel, transportation, memorandum		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 25 pages	22. Price \$4.50

1. Report No. TM 6-1-74	2. Government Accession No. PB-235 042/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Establishment of East Bay Pre-BART Traveler Panels		5. Report Date January 1974	
		6. Performing Organization Code	
7. Author(s) Frances M. Carp		8. Performing Organization Report No. TM-6-1-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U. S. Department of Transportation U. S. Department of Housing & Urban Development		13. Type of Report and Period Covered Technical Memorandum	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report is essentially an addendum to pre-BART traveler attitudes and perception--East Bay Panel (BART I, Part II, Vol I) at the time the earlier report was written there had been no opportunity to constitute the panels as intended in the Study Design. Of necessity, the report was based on respondent groups defined by the sampling strategy rather than by the Study Design. The purpose of the sampling strategy was to insure that data would be collected on an adequate number of persons (50 or more) who would be eligible for membership in each panel, so that the panels could be selected from the pool of respondents. The present report presents the procedures and results of that selection.			
17. Key Words Pre-BART, Memorandum, Traveler, Selection, Panel		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, VA 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 32	22. Price \$5.00

1. Report No. TM 8-1-74	2. Government Accession No. PB-235 043/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Preliminary Assessment of Seven-Day Travel Records		5. Report Date January 1974	
		6. Performing Organization Code	
		8. Performing Organization Report No. TM 8-1-74	
7. Author(s) Frances M. Carp		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		11. Contract or Grant No. DOT-OS-30176	
		13. Type of Report and Period Covered Technical Memorandum	
		14. Sponsoring Agency Code	
12. Sponsoring Agency Name and Address U. S. Department of Transportation U. S. Department of Housing & Urban Development		15. Supplementary Notes	
16. Abstract MTC presently has pre-BART trip records of various sorts from three BART-impact studies. Since little is known about the utility of trip records as a data-collection mode or about efficient management of the data they may produce, a significant contribution to the field can be made by assessing the worth of the data presently on file, suggesting modifications in future instruments and developing data coding and management procedures. This assessment of the 7-day trip records which were used with the traveler study home interview focuses on the two issues in the evaluation of trip record data-- <ol style="list-style-type: none"> 1. Does a low return rate decrease the utility of travel record data 2. Does a selective return rate inhibit the ability to generalize from the data collected There was a respectable return rate of 67--for the records, but there was considerable variability in return rate from panel to panel. Possible implications are that the uneven return rate biases the data away from the cross-sectional sampling base, and for some panels, the low return rate must call into question the capability of the trip record data to represent response tendencies of the panel itself.			
17. Key Words Pre-BART, Comparison, Trip record, travel, memorandum		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, VA 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) n/a	21. No. of Pages 27	22. Price \$5.50

1. Report No. TM 9-1-74	2. Government Accession No. PB-235 044/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Pre-BART Systemwide Environmental Impact Data		5. Report Date January 1974	6. Performing Organization Code
		8. Performing Organization Report No. TM 9-1-74	
7. Author(s) Frances M. Carp		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This is a status report on the data for the systemwide sample in the Environmental Impact study as those data are filed at MTC. It provides information regarding access to the data and completes the description of information items contained in the file by describing additions which were made subsequent to the earlier descriptive reports in the BART Impact Final Report Series--BART II, Volumes IV and V--Preparation of the pre-BART data file for the systemwide sample and rationale and procedure for the collection of the pre-BART geographic, census and secondary data for the systemwide strategy.			
17. Key Words Pre-BART, Survey, Residential, Systemwide, Environment, Data Base		18. Distribution Statement Document is available to the public throughout the National Technical Informational Services, Springfield, VA 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 10	22. Price \$4.50

1. Report No. TM 9-15-74	2. Government Accession No. PB 240 019/AS	3. Recipient's Catalog No.	
4. Title and Subtitle A Comparison of Several Methods of Collecting Travel Time Data in Analysis of Urban Travel Behavior		5. Report Date November 1974	6. Performing Organization Code
7. Author(s) Michael Johnson		8. Performing Organization Report No. TM 9-15-74	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development		13. Type of Report and Period Covered Technical Memorandum	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract <p>Research was done to compare and evaluate different methods of collecting travel time data intended for use in analysis of urban travel behavior. Four methods were compared--(1) respondent reports obtained in interviews, (2) manual calculations based on maps, bus schedules, etc., (3) zonal network calculations, based on computerized simulations of the transportation system, and (4) ad-hoc network calculations, similar to the zonal calculations but based on geographically more precise representations of trip origins and destinations. Each method was used to produce values of auto and bus travel times for a common sample of 213 work trips.</p> <p>Comparisons of the values produced by the different data collection methods indicated moderate discrepancies for variables measuring primarily in-vehicle travel time (auto time, bus total time, and bus in-vehicle time) and very substantial discrepancies for variables measuring bus headway, waiting or walking times. Analyses intended to evaluate the relative accuracy of the different calculation methods were unable to do so with a satisfactory level of discrimination. Theoretical arguments as well as some empirical evidence are presented criticizing additional research.</p>			
17. Key Words Travel behavior, Trip Record, Work trip, Travel Time, Comparison, Methodology, Network		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, VA 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 133	22. Price \$5.75

1. Report No. TM 10-15-74	2. Government Accession No. PB 239 212/AS	3. Recipient's Catalog No.	
4. Title and Subtitle The Determination and Evaluation of Objective Access Times to Public Transit for Dis-Aggregate Traveler Behavior Modeling		5. Report Date November 1974	6. Performing Organization Code
		8. Performing Organization Report No. TM 10-15-74	
7. Author(s) Fred A. Reid		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		11. Contract or Grant No. DOT-OS-30176	
		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing and Urban Development		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This paper describes the development and evaluation of methods for calculating objective individual access times to a transit network file. Given at least city-block definitions of a sample of trip-ends and a regional network, a method is shown for modifying the standard network inputs to give all the trip component descriptions available from network software but individually optimized. This result differs from interzonal representations of trips by the same network primarily in that it shows the full variation of walk access time for the sample.			
17. Key Words Development, evaluation, measurement, calculations, disaggregate		18. Distribution Statement Document is available to the public through the National Technical Information Services, Springfield, VA 22161	
19. Security Classif. (of this report) N/A	20. Security Classif. (of this page) N/A	21. No. of Pages 53	22. Price \$3.75

1. Report No. TM 11-3-75	2. Government Accession No. PB 240 414/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Assessment of the Impacts of the AC Transit Strike upon BART		5. Report Date February 1975	6. Performing Organization Code
		8. Performing Organization Report No. TM 11-3-75	
7. Author(s) Stephen G. Cohn, Raymond H. Ellis, Peat,		10. Work Unit No. (TRIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		11. Contract or Grant No. DOT-OS-30176	13. Type of Report and Period Covered Technical Memorandum
12. Sponsoring Agency Name and Address U.S. Dept. of Transportation U.S. Dept. of Housing & Urban Development		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract The Alameda-Contra Costa Transit District (AC Transit) and the Bay Area Rapid Transit District (BART) provide bus and rapid rail public transportation, respectively, on the east side of San Francisco Bay. On July 1, 1974, AC Transit employees began a strike that was to last 62 days. This study assesses the impacts of the strike on BART travel, on travel between the east side of the Bay and San Francisco, and on the travelers who normally used AC Transit.			
17. Key Words Bay Area Rapid Transit System (BART), BART Impact Program, transit strike, public transportation, mass transit, bus transit, rail rapid transit, travel behavior, urban transportation		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 53	22. Price \$4.75

1. Report No. TM 12-4-75	2. Government Accession No. PB 241 287/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Environment Project Preliminary Findings - Barriers		5. Report Date March 1975	6. Performing Organization Code
		8. Performing Organization Report No. TM 12-4-75	
7. Author(s) Gruen Associates, Inc. and De Leuw, Cather & Co.		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address U. S. Dept. of Transportation U. S. Dept. of Housing & Urban Development		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract The construction of the BART system inevitably resulted in changes to patterns of vehicular and pedestrian movement. This preliminary analysis assesses the effect of BART facilities on the ease and hindrance of vehicular and pedestrian movement in areas adjacent to BART lines and stations. The assessment describes and quantifies the relationship between BART and other transportation facilities (freeways, railroads and arterials) acting as barriers. It also includes a description of the extent and locations where BART has created new barriers to pedestrian and vehicular movement patterns, and goes on to describe how BART has tried to mitigate barrier impact.			
17. Key Words Bay Area Rapid Transit System (BART), BART Impact Program, Vehicular and pedestrian movement, Barrier		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 15	22. Price \$3.75

1. Report No. TM 13-4-75	2. Government Accession No. PB 241 699/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Environment Project - Preliminary Findings Sound		5. Report Date March, 1975	6. Performing Organization Code
		8. Performing Organization Report No. TM 13-4-75	
7. Author(s) Gruen Associates, Inc. & De Leuw, Cather & Co.		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		11. Contract or Grant No. DOT-OS-30176	
		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address U.S. Dept. of Transportation U.S. Dept. of Housing & Urban Development		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report presents early aspects of a measurement and analysis program to assess the acoustic impact of the Bay Area Rapid Transit System (BART) on its surrounding environment. It covers findings relative to simultaneous recordings of sound levels taken on-board BART trains and at wayside positions adjacent to the BART tract. These early findings will be combined with measurements of adjacent community ambient sound levels to arrive at an overall assessment of BART acoustic impact on its surroundings.			
17. Key Words Bay Area Rapid Transit System (BART) BART Impact Program Acoustic impact On-board and wayside sound levels		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, VA. 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 20	22. Price \$3.75

1. Report No. TM 14-4-75	2. Government Accession No. PB 241 697/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Environment Project - Preliminary Findings Regional Air Emissions		5. Report Date March 1975	6. Performing Organization Code
7. Author(s) Gruen Associates, Inc. & De Leuw, Cather & Co.		8. Performing Organization Report No. TM 14-4-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS)	
12. Sponsoring Agency Name and Address U.S. Dept. of Transportation U.S. Dept. of Housing & Urban Development		11. Contract or Grant No. DOT-OS-30176	13. Type of Report and Period Covered Technical Memorandum
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This study presents findings relative to changes in the emission of automobile generated pollutants (CO, HC and NO _x) resulting from VMT changes associated with the use of BART. The effect of changing VMT on emissions of pollutants is assessed for both the total 9-county Bay Area airshed and for the 3-county BART service area. The findings are related to the Control Strategy Plan for the San Francisco Bay Area.			
17. Key Words Bay Area Rapid Transit System (BART) BART Impact Program Automobile generated pollutants Emission levels		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 6	22. Price \$3.25

1. Report No. TM 15-3-75		2. Government Accession No. PB 245 983/AS		3. Recipient's Catalog No.	
4. Title and Subtitle Immediate Travel Impacts of Transbay BART				5. Report Date May 1975	
				6. Performing Organization Code	
7. Author(s) Alistair Sherret, Peat, Marwick, Mitchell & Co.				8. Performing Organization Report No. TM 15-3-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. CA-09-0025, DOT-OS-30176, CA-09-0042	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing and Urban Development				13. Type of Report and Period Covered Technical Memorandum	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract <p>The Bay Area Rapid Transit (BART) System started service beneath San Francisco Bay in September 1974. This report analyzes travel patterns in the transbay corridor in the period before and immediately after the start of transbay BART service. Aggregate transbay travel by automobile and transit are analyzed in terms of historical trends and seasonal and short-term variations as the basis for assessing the impacts of BART. Impacts on traffic congestion are analyzed using highway travel time survey data. The results of on-route questionnaire surveys of transbay travelers using automobile, BART, and bus in October 1974 provide descriptions of the origin-destination pattern of transbay trips, their purposes, and the profiles of travelers. Traveler choices between BART and the alternative modes are analyzed in terms of reported travel times and costs and ratings of perceived importance and satisfaction for a set of 14 travel factors (impedances) included in the survey questionnaire.</p>					
17. Key Words Bay Area Rapid Transit (BART) System, BART Impact Program, public mass transit, rail rapid transit, urban transportation, travel behavior, program evaluation.				18. Distribution Statement Document is available to the public through the National Technical Information Service Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 110	
				22. Price \$6.25	

1. Report No. TM 17-4-76	2. Government Accession No. PB 251 571/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Impacts of BART on the Natural Environment Interim Service Findings		5. Report Date March, 1976	6. Performing Organization Code
		8. Performing Organization Report No. TM 17-4-76	
7. Author(s) DeLeuw, Cather & Co., Gruen Assoc., Inc.		9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705	10. Work Unit No. (TRAIS)
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development		11. Contract or Grant No. DOT-OS-30176	
		13. Type of Report and Period Covered Technical Memorandum	
15. Supplementary Notes		14. Sponsoring Agency Code	
16. Abstract This report documents the study done on the impacts of BART on the natural environment. The general subject area is divided into three categories which define its limits and organize its many aspects. The categories are: (a) Biota (Wildlife & Vegetation) (b) Soils and Geology, and (c) Drainage & Water Systems. Since almost the entire area traversed by BART is urbanized and fully developed, this natural environment was not a major topic of study. However, a comprehensive review of BART's possible impacts was performed because impacts on the natural environment are often not apparent even when they are quite significant from an ecological point of view.			
17. Key Words Bay Area Rapid Transit System (BART), BART Impact Program, Environmental Impacts, Biota, Soils and Geology, Drainage & Water Systems		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 79	22. Price \$5.00

SECTION VI. Final Reports

The Final Reports are the summary documents describing and interpreting the findings of all technical work accomplished, and intended for wide dissemination via DOT to transportation planners and policy decision-makers.

1. Report No. FR 1-14-75		2. Government Accession No. PB 242 438/AS		3. Recipient's Catalog No.	
4. Title and Subtitle A Generalized No-BART Alternative Transportation System				5. Report Date May, 1975	
				6. Performing Organization Code	
7. Author(s) McDonald & Smart, Inc.				8. Performing Organization Report No. FR 1-14-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705				10. Work Unit No.	
				11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address United States Department of Transportation U.S. Department of Housing and Urban Development Washington, D.C.				13. Type of Report and Period Covered Final Report	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract This report formulates the generalized No-BART alternative transportation developments for use in the BART Impact Program. Based upon policy assumptions defining the probable decision environment in the San Francisco Bay Area, alternative transportation developments which are likely to have been implemented in the absence of the Bay Area Rapid Transit system have been identified. The policy assumptions are documented by interviews with decision-makers and documentary research in decision variables such as planning, growth trends, transportation demands, interest group influences, and financing sources.					
17. Key Words BART Impact Transportation Alternatives Bay Area Rapid Transit (BART)				18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
19. Security Classif. (of this report) N/A		20. Security Classif. (of this page) N/A		21. No. of Pages 195	22. Price \$7.25

1. Report No. FR 3-14-75		2. Government Accession No. PB 245 617/AS		3. Recipient's Catalog No.	
4. Title and Subtitle A History of the Key Decisions in the Development of Bay Area Rapid Transit (BART)				5. Report Date September 1975	
				6. Performing Organization Code	
				8. Performing Organization Report No. FR 3-14-75	
7. Author(s) Richard Grefe, Richard Smart McDonald & Smart, Inc.				10. Work Unit No. (TRIS)	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705				11. Contract or Grant No. DOT-OS-30176	
				13. Type of Report and Period Covered Final Report	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing & Urban Development Washington, D.C.				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract This report describes the key decisions in the planning and implementation of Bay Area Rapid Transit (BART) during the period 1947 through 1974. The decisions are evaluated in terms of the influences brought to bear upon the decision-making process to determine decision outcomes.					
17. Key Words BART Impact, Bay Area Rapid Transit (BART), Transportation Planning, Transportation Decision-Making, Urban Transit Decision-Making				18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
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1. Report No. FR 4-17-75	2. Government Access on No. PB 247 768/AS	3. Recipient's Catalog No.	
4. Title and Subtitle Photo Survey of Development and Activities in The Vicinity of BART Stations - User's Guide		5. Report Date July 1975	6. Performing Organization Code
7. Author(s) David L. Christensen		8. Performing Organization Report No. FR 4-17-75	
9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, CA 94705		10. Work Unit No. (TRAIS)	11. Contract or Grant No. DOT-OS-30176
12. Sponsoring Agency Name and Address U.S. Department of Transportation and U.S. Department of Housing & Urban Development Washington, D.C.		13. Type of Report and Period Covered Final Report	
15. Supplementary Notes Short Title: Photo Survey User's Guide		14. Sponsoring Agency Code	
16. Abstract A general description of BART Impact Program Photo Survey data and basic instructions for their use. The Photo Survey is a record of development and activities in the vicinity of BART stations at given points in time. The record consists of three categories of data: ground level photos, aerial photos and supplementary assessor's land use information. The three kinds of data are cross-indexed by map overlays. More detailed technical information concerning procedures used in establishing and maintaining the Photo Survey data are presented in the Photo Survey Technical Report (Christensen, 1975).			
17. Key Words Aerial Photographs, Assessments, Ground Photographs, Information Systems, Instruction Manuals, Land Use, Real Property, Urban Development		18. Distribution Statement Document is available to the public through the National Technical Infor- mation Service, Springfield, Virginia 22161	
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9. Performing Organization Name and Address Metropolitan Transportation Commission Hotel Claremont Berkeley, California 94705		10. Work Unit No. (TRAIS)	
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		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract The purpose of the Photo Survey Technical Report is to present a description of the Photo Survey project development process along with useful technical information for those who use, maintain or update the Photo Survey. The Photo Survey is a record of development and activities in the vicinity of BART stations at given points in time. The record consists of three categories of data: ground level photos, aerial photos and supplementary assessor's land use information. The three kinds of data are cross-indexed by map overlays. Additional description of Photo Survey data, as well as detailed instructions for their retrieval and cross referencing may be found in the <u>Photo Survey Users Guide</u> (Christensen, 1975).			
17. Key Words Aerial Photographs, Assessments, Ground Photographs, Information Systems, Instruction Manuals, Land Use, Real Property, Urban Development		18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
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